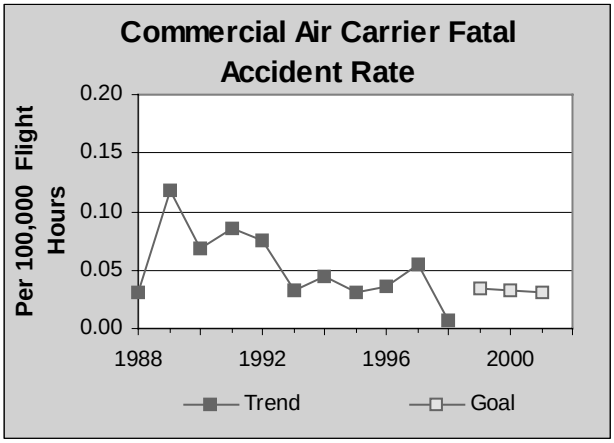
MAJOR PERFORMANCE PROGRAM

AIR

In the program performance area of air transportation, commercial air carrier fatal accident rates dropped off significantly as did exposure to aircraft noise. Concurrently, improvements were made in the areas of runway pavement conditions and international aviation growth.

SAFETY

AIR CARRIER FATAL ACCIDENT RATE



Performance Measure: Number of fatal aviation accident rate for commercial air carriers per 100,000 flight hours.

2001 Goal: .031

2000 Goal: .033

1999 Goal: .034

1998 Performance: .006

Commercial aviation is one of the safest forms of transportation. But when passengers board an airplane, they give up personal control and face an unfamiliar risk. The public demands a high standard of safety, and expects continued improvement.

There was a single fatality related to commercial aviation during calendar year 1998, which involved a ground crew member. With very low accident rates, year to year variance should be expected as results fluctuate as they follow longer trends in the industry. Viewed in this context, 1998's rate dropped from the unusually high rate in calendar year 1997 and continues the long-term trend toward improved safety in commercial aviation.

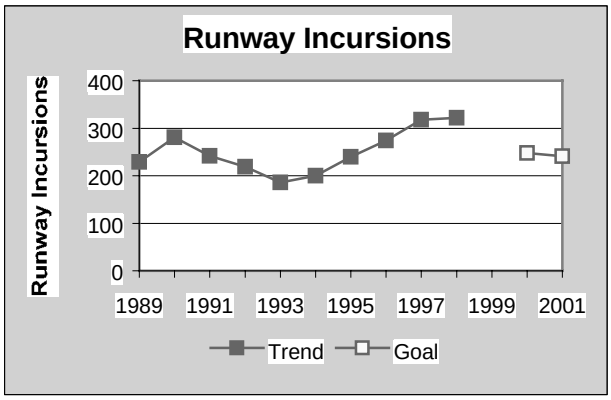
In 1998, the Certification, Standardization and Evaluation Team (CSET) created an enhanced Certification Process Document (CPD) making identification of regulatory requirements for air carrier certification based on types of operations and types of aircraft significantly easier. By eliminating confusion on the applicability of rules, it ensures that all carriers would be certified at one level of safety.

Significant strides were made in using the Safety Performance Analysis System (SPAS) a computer-based decision support tool to help Aviation Safety Inspectors identify certificate holders that may present a safety risk. Software

enhancements continue to improve the functionality of the system. One hundred and thirty-five SPAS training classes at 11 sites were conducted during FY 1998, expanding the number of Aviation Safety Inspectors trained to exploit the full capability of SPAS.

A resource-targeting model was also developed in 1998 to provide an analytical tool for use in prioritizing workload requirements in terms of Aircraft Certification's highest safety priorities. The model is specifically designed to improve the effectiveness and efficiency of the Aircraft Certification Systems Evaluation Program.

RUNWAY INCURSIONS



Performance Measure: Number of runway incursions.

2001 Goal: 241

2000 Goal: 248

1999 Goal: 270

1998 Performance: 325

Runway incursions create dangerous situations that can lead to serious accidents. A runway incursion occurs when an aircraft, ground vehicle or person occupies or crosses a runway that is in active use for takeoffs and landings.

Runway incursions are most likely to occur at complex, high volume airports. These airports typically have multiple parallel or intersecting runways; multiple taxiway and runway intersections; complex traffic patterns; and the need for vehicular and aircraft traffic to cross active runways.

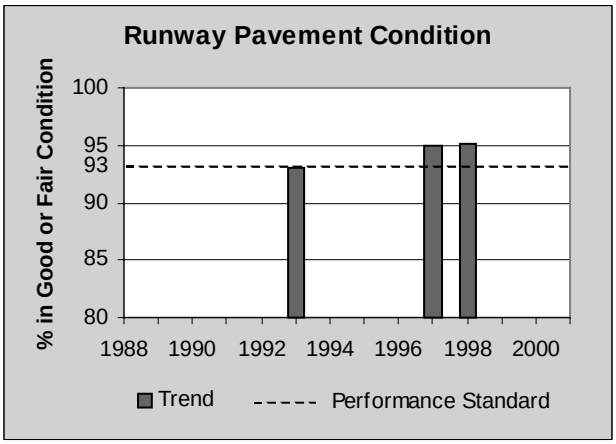
The preliminary numbers for 1998 show what may be a tapering off in the growth of runway incursions. There appears to be a smaller increase in runway incursions this year; five percent growth over 1997 instead of the 18 to 20 percent annual growth seen before. When this count is normalized to airport operations, the rate of incursion per 100,000 operations was 0.5, the same rate as in 1997. While a continued increase in runway incursions is unacceptable, the apparent stabilization of the rate may indicate that programs designed to lower risk are beginning to have an effect.

The total count of runway incursions has steadily increased between 1993 and 1998. Runway incursions fall into three general classifications. In 1997, the percentage breakdown among the three categories was 25 percent operational errors; 55 percent pilot deviations; and 20 percent vehicle or pedestrian deviations. For 1998, the breakdown was 28 percent operational errors; 56 percent pilot deviations; and 16 percent vehicle or pedestrian deviations. The main causal factors for 1998 runway incursions continued to be communications, airport knowledge and cockpit procedures for maintaining orientation.

In 1998, FAA promoted awareness by preparing exhibits for conferences held by general aviation user groups and the Oshkosh Fly-In. The Runway Incursion Action Teams visited five airports with runway incursion incidents and developed action plans to reduce incursions at Cleveland, Los Angeles and Long Beach.

MOBILITY

RUNWAY PAVEMENT CONDITION



Performance Measure: Percentage of runways in good or fair condition at commercial service airports and reliever airports, as well as, selected general aviation airports.

2001 Goal: 93

2000 Goal: 93

1999 Goal: 93

1998 Performance: 95

Deteriorated airport runway pavement can damage propellers, turbines and airplane landing gear.

Proper design, construction and maintenance can slow this deterioration, but runways still need complete rehabilitation every 15 to 20 years. This means that during a typical year, five to seven percent of runways require rehabilitation.

Federal airport funding helps achieve this necessary level of rehabilitation, and – combined with proper maintenance – helps keep runway condition at or above the minimum level needed to ensure efficient airport operation.

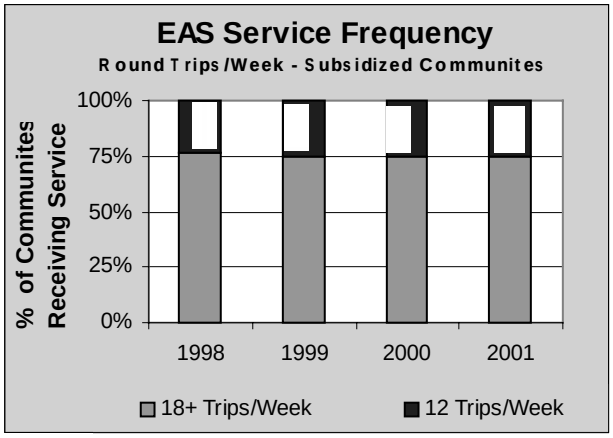
In 1998, about 73 percent of commercial service airports had runways in good condition and 24 percent were in fair condition. Only three percent were noted in poor condition.

Maintaining and rehabilitating runways cost less than total reconstruction of runways. Since FY 1995, FAA's Airport Improvement Program (AIP) grant recipients have been required to show evidence of an airport pavement maintenance management program.

An AIP demonstration program was conducted to fund crack sealing at non-primary airports, and the FAA has proposed legislation to make this program permanent.

External factors influencing this goal in 1998 include air carrier flight operations at commercial service airports, which have increased by 13 percent over the past five years. This volume of operations can increase wear on runway pavement. Countering this impact have been generally mild winters in 1997 and 1998, which may have helped in the accomplishment of runway resurfacing and repair.

ESSENTIAL AIR SERVICE



Performance Measure: Percentage of subsidized communities with at least two round trips per day, six days a week, 12 round trips per week.

2001 Goal: 100

2000 Goal: 100

1999 Goal: 100

1998 Performance: 100

Performance Measure: Percentage of subsidized communities with at least three round trips per day, six days a week, 18 round trips per week.

2001 Goal: 75

2000 Goal: 75

1999 Goal: 75

1998 Performance: 76

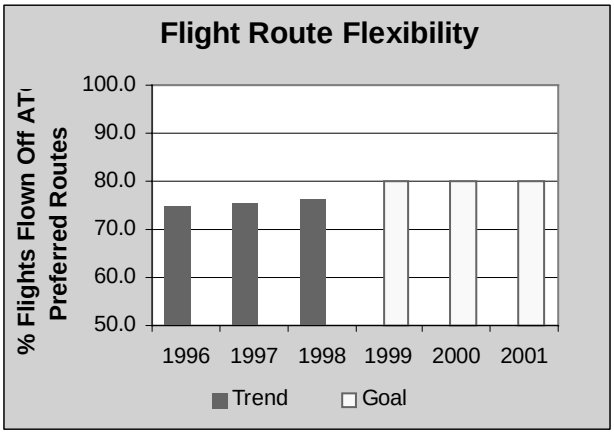
Under the Essential Air Service (EAS) program, the Department subsidizes an air carrier to provide scheduled air service only if no other carrier is willing to provide the service subsidy-free. Presently, 76 communities in the continental U.S., Hawaii, Puerto Rico and the U.S. territories, "non-Alaska," receive subsidies, and 27 more in Alaska.

Out of the 500 plus non-Alaskan communities eligible for Essential Air Service, 99.9 percent received continuous air service of at least two round trips a day, six days a week, either from subsidized or market supported carriers. The .1 percent exceptions were 18 communities that experienced a service hiatus of 14 days due to an airline strike.

Of the 72 communities receiving subsidized service, 55 had at least three round trips per day, six days a week. Thus DOT met its goal of having 75 percent of the subsidized communities receive this higher level of service. Airlines have reported that more than two round trips per day are needed to maintain a viable market. This 1998 performance data excludes 26 Alaskan communities and three non-Alaskan communities whose unique service frequency needs and geographic situation had to be addressed individually.

ECONOMIC GROWTH & TRADE

FLIGHT ROUTE FLEXIBILITY



Performance Measure: Percentage of flights that aircrafts are able to fly off air traffic control preferred routes.

2001 Goal: 80

2000 Goal: 80

1999 Goal: 80

1998 Performance: 76.2

Many of the most heavily traveled routes in the national airspace system have published air traffic control (ATC) preferred routes, which are based on flying from one navigational air to another to ensure accuracy in navigation.

These routes are designed to minimize conflicts in congested airspace, and they are an especially important tool in helping air traffic controllers organize traffic flow around major airports. However, these routes can differ significantly from the route that pilots or flight planners would normally propose between two cities. They desire the capability to optimize their operations based on their own objectives and constraints, which vary flight-by-flight and user-by-user.

By allowing aircraft to fly the most direct routes, or choose other indirect routes to avoid weather, there can be time and cost savings or smoother flights that avoid turbulence. Enhanced automation aids now being developed facilitate the use of more direct routes.

In 1998, 76.2 percent of flights were not subject to air traffic control preferred routes, falling just short of the FAA goal of 77 percent. The aim in not assigning preferred routes is to give increased flexibility to aircraft, which may translate into improved scheduling efficiency and reduced flight miles.

Activities in 1998 included a 180-day testing for the elimination of 68 published routes, which began in May 1998. The current preferred route database contains approximately 2,000 high altitude preferred routes.

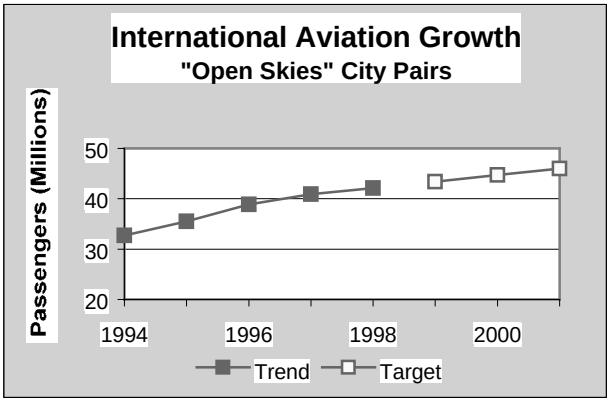
Other initiatives that may have partially supported this goal are the North American Route Program (NARP) and the Required Navigation Performance Standards (RNP-10). The NARP allows aircraft to file more efficient routes unimpeded by the preferred route system. The RNP-10 allows for reduced separation standards in the Pacific oceanic area which affords greater flexibility for route planning.

Also, in a continuing effort to reduce system-wide delays, a new procedure was implemented in 1998 that required all requests for preferred route restrictions to be coordinated through the

Air Traffic Control System Command Center (ATCSCC).

The aim of this procedure was to prevent restrictions that might impact several en route centers and cause unnecessary customer delays in the air and on the ground.

INTERNATIONAL AIR SERVICE



Performance Measure: Number of passengers, in international markets with open aviation agreements.

2001 Goal: 46

2000 Goal: 44.7

1999 Goal: 43.4

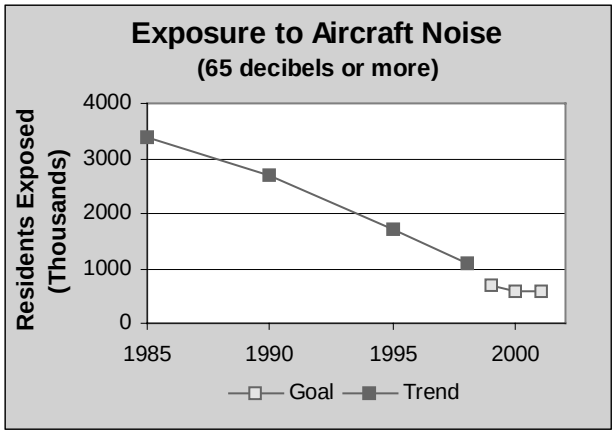
1998 Performance: 42.1

Air transportation is the principal mode for international passenger travel. International air transportation has been subject to restrictive bilateral agreements with other countries since the 1940s. These agreements tended to raise prices and artificially suppressed aviation growth in these markets. The International Air Transportation Policy Statement issued by DOT in 1995 aimed to open international air travel to market forces. DOT works within this framework to open international air transportation so that increased service, lower fares and enhanced opportunity for economic growth can be achieved.

In FY 1999, DOT added five new open skies agreements with Italy, Pakistan, the United Arab Emirates, Bahrain and Argentina. Thirty-six nations around the globe now have agreed to "open skies" with the United States.

HUMAN & NATURAL ENVIRONMENT

AIRCRAFT NOISE EXPOSURE



Performance Measure: Number of people in the U.S., in thousands, exposed to significant aircraft noise, Decibel Noise Level of 65 dB or greater.

2001 Goal: 600

2000 Goal: 600

1999 Goal: 680

1998 Performance: 1,100

Public concern and sensitivity to aircraft noise around airports is high. In recent years, noise complaints have increased even while quieter aircraft technology

has been introduced. This aircraft noise is an undesired by-product of the nation's mobility, and the government acts to reduce the public's exposure to unreasonable noise levels.

In 1998, about 1.1 million people were impacted by significant aircraft noise at the 250 largest civil airports with jet operations in the U.S.

1998 modeling used improved airport and population data. Therefore, while the airline fleet data indicate a higher introduction of airplanes that have been "hushkitted," the overall noise exposure was slightly higher than projected. The new analysis still confirms that as a result of the legislated phase-out program, the number of people exposed to significant aircraft noise exposure continues to drop.

Activities in 1998 included funding for noise reduction activities such as the soundproofing of residences and buildings used for educational or medical purposes in the vicinity of airports, the purchase of buffer zones around airports and noise reduction planning.